

## Effect of Maize residues (stalks, cobs, leaves) and sawdust substrates on the growth and yield of oyster mushroom (*Pleurotus spaidus*).

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### Abstract

The cultivation of oyster mushroom (*Pleurotus spaidus*) is considered as good environmental friendly approach for the bio-conservation of agricultural residues into food. *Pleurotus spaidus* is a good source of vitamins, amino acids, proteins and also contain less amount of fats cholesterol. *P. spaidus* is a heterotrophic organism and require a nutritious substrates for growth. In this study we evaluate the efficiency of maize residues (stalks, cobs, leaves) along with kikar tree (*Vachellia nilotica*) sawdust as substrate on the growth, yield and biological efficiency of *P. spaidus*. Five treatments were prepared in different proportions and data was recorded after spawn inoculation to harvesting of mushrooms using different parameters like; spawn running, pinhead's formation, number of pinhead's, development of fruiting bodies, yield and biological efficiency. Results of this study revealed that Treatment-T1 (sawdust 100%) significantly influenced with most of the growth parameters as compared with other treatments. Similarly, Treatment-T1 (sawdust 100%) produced maximum yield (444 g) and have maximum biological efficiency (88.8%), while Treatment-T5 (maize residues 100%) produced minimum yield (263 g) and have minimum biological efficiency (52.6%). It was concluded that kikar tree sawdust is considered as potential substrate for the commercial cultivation of oyster mushroom (*P. spaidus*).

### Biograph :

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